

# NOSA<sup>®</sup>



A MICROMEGA Group Company

Your trusted partner in occupational risk management in the workplace.

## NOSA HSE QUALIFYING CRITERIA AND CLASSIFICATION OF INCIDENTS

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## 1. SCOPE

This procedure provides a standard by which to manage the classification and measurement of safety, health and environmental qualifiers.

## 2. PURPOSE

To align the NOSA HSE qualifying criteria with international practices.

## 3. REFERENCES

The standard and the definitions have been aligned with sustainability reporting guidelines as far as possible.

## 4. RESPONSIBILITY

Auditors are responsible for implementation of this procedure.

## 5. OBJECTIVE

To provide clarity to all users of the NOSA system and star grading audit protocols on the implementation of the Health, Safety and Environmental qualifying criteria for use with the NOSA system and star grading audit protocols.

## 6. DEFINITIONS

### 6.1 GENERAL

#### 6.1.1 CONTRACTOR

A person who undertakes work at an operation under a contract, full time or part time, who is not a direct employee (i.e. on the staff) of that operation.

#### 6.1.2 DAYS OF DISABILITY

The total of full days on which the affected person was unable to work as a result of a permanent or temporary disability or occupational disease. This does not include the day the incident occurred or the day the person returned to work, but it does include all intervening days (including Sundays, days off or plant shut-down). It includes inability to work subsequent to the affected person's return to work.

#### 6.1.3 DISABLING INJURY

A work-related injury that results in death, permanent disability, permanent partial disability or temporary disability. Disabling injuries include lost workday cases, restricted workday cases and noise induced hearing loss. These injuries are used in calculating the disabling injury frequency rate.

#### 6.1.4 DISABLING INCIDENT

A work incident, whether involving injury or occupational disease, that results in death, disability or ill health (refer definition 7.1).

#### 6.1.5 DISABLING INJURY FREQUENCY RATE

The number of deaths and disabling injuries (see 6.1.3) per 200 000 employee hours of exposure.

#### 6.1.6 DISABLING DISEASE FREQUENCY RATE

The number of deaths and disabling diseases per 200 000 employee hours of exposure, i.e. the total number of irreversible and reversible cases. (Reversible cases that result in lost time or restricted work [light duty] only).

#### 6.1.7 EMPLOYEE

For the purpose of calculating exposure under this standard: any person engaged in activities for an employer where an employer/employee relationship exists.

**NOTE:** In industry, contractors are excluded and labour broker staff are included.  
In mining, contractors and labour broker staff are included.

#### 6.1.8 EMPLOYMENT

All activities performed in carrying out an assignment or request connected with the employment, including incidental/related activities not explicitly demanded, and work voluntarily undertaken while on duty with the intention of benefiting the employer, and any other activities undertaken with the consent of the employer.

#### 6.1.9 ENVIRONMENTAL IMPACT

Any change to the environment whether positive or negative. Environment is made up of the natural environment / ecology (air, land, water, natural resources, fauna and flora) and the community (interactions and social, cultural, economic and bodily well-being). The change is usually caused by an incident.

#### 6.1.10 EXPOSURE TIME

The total number of employee hours worked by all employees including those in operating, production, maintenance, transportation, clerical, administrative, sales and other activities. (See also 6.2.2)

#### 6.1.11 FATALITY (work related death)

A death resulting directly from an occupational incident.

#### 6.1.12 FACTOR FOR CALCULATION OF FREQUENCY RATE

Number of incidents multiplied by 200 000 hours divided by the actual number of hours worked. (The hours are derived from the fact that 1 employee works 2000 hours per year, thus 100 employees work 200 000 per year).

### 6.1.13 FIRST-AID INJURY

An injury that can be successfully treated by a qualified first-aider and does not require further treatment by a medical professional. (Statistics must be kept.)

### 6.1.14 INJURY

An injury occurs at the point where the body's natural resistance is exceeded by an external force/substance.

### 6.1.15 IRREVERSIBLE DISEASE

Occupational health cases diagnosed as having irreversible health effects such as occupational asthma, work related cancers and irreversible respiratory disorders e.g. asbestosis. Noise induced hearing loss cases are calculated separately as per 7.3.4. The date of diagnosis will be the date on the report of the medical practitioner.

### 6.1.16 LABOUR BROKER

Any natural person who conducts or carries on any business whereby such person for reward provides a client of such business with other persons to render a service or perform work for such client, or procures such other persons for the client, for which services or work such other persons are remunerated by such person.

### 6.1.17 LOST TIME INJURY

The term "lost workday case" is also used. The employee, as a result of the injury (or disease) is unable to carry on with all the normal duties on the next day or shift, as verified by a medical practitioner.

### 6.1.18 MEDICAL TREATMENT INCIDENT

An incident, which does not result in death, permanent impairment or temporary total disablement, but which requires the affected person to have medical treatment. The person rendering the treatment must be a medical professional like a doctor, occupational nursing practitioner or paramedic (excluding first-aid). (Statistics must be kept.)

### 6.1.19 NON-DISABLING INJURY

A non-disabling injury is an injury that does not result in death, permanent impairment or temporary disability, but which requires medical treatment (including first-aid).

### 6.1.20 NON-DISABLING INCIDENT

A non-disabling incident is any incident arising out of and in the course of employment, which does not result in lost time as defined in 6.1.17.

### 6.1.21 OCCUPATIONAL DISEASE

An occupational disease is caused by environmental factors, the exposure to which is peculiar to a particular process, trade or occupation, and to which an employee is not ordinarily subjected or exposed to when away from such employment.



### 6.1.22 OCCUPATIONAL INCIDENT

Any event that results in (or has the potential to result in) injury, illness, disease, damage or harm to the environment.

### 6.1.23 OCCUPATIONAL INJURY

Injury arising out of or in connection with work processes, i.e. not involving violence, murder or other issues not directly related to the workplace. (Cases outside the scope of the audit will be excluded.)

### 6.1.24 PERMANENT DISABILITY

A permanent disability is the result of an incident other than death which permanently and totally incapacitates an employee from following any gainful occupation, or which results in the loss of or the complete loss of use of any of the following in one incident:

- a) Both eyes;
- b) One eye and one hand, or one foot;
- c) Both hands or both feet.

An incident is classified as a "permanent disability" if the medical doctor treating the patient considers the patient to be 30% or more permanently disabled.

### 6.1.25 PERMANENT PARTIAL DISABILITY

Permanent partial disability other than death or permanent total disability, which results in the complete loss, or loss of use, of any member or part of a member of the body, or any permanent impairment of functions of the body or part thereof, regardless of any pre-existing disability of the injured member or impaired body function, e.g. amputation of a finger, etc.

The following injuries are not classified as permanent partial disability:

- Inguinal hernia, if it is repaired;
- Loss of finger-nails or toe-nails;
- Loss of tip of finger without bone involvement;
- Loss of teeth;
- Disfigurement;
- Strains or sprains, which do not cause permanent limitation of motion;
- Fractures.

### 6.1.26 PERMANENT AND TEMPORARY INJURIES IN THE SAME INCIDENT

In those few cases when an employee suffers in one incident a permanent partial injury to one part of the body and a temporary total injury to another part of the body, the more severe effect will be measured.

### 6.1.27 REVERSIBLE DISEASE

Occupational health cases diagnosed as having reversible health effects such as reversible dermatitis, temporary sterility as a result of radiation exposure and photokeratitis (arc eyes) that did not result in any permanent vision impairment.

**NOTE:** The date of diagnosis will be the date on the medical practitioner's report.

### 6.1.28 TEMPORARY DISABILITY

A temporary disability is any disability which does not result in death or permanent impairment, but which renders the injured person unable to carry on his normal activities, or part of the activities of his/her employment (the job s/he normally does), during his entire regular shift on any one or more days (including Sundays, days off or plant shutdown). This includes the light duty cases known as temporary partial disability and all fractures and bone damage, including fractures that do not result in permanent impairment or restriction of normal function of the injured member.

## 6.2 DEFINING EXPOSURE HOURS

### 6.2.1 CALCULATION OF EMPLOYEE HOURS

Employee hours shall be calculated from the payroll or time clock records. When this is impossible, they may be estimated by multiplying the total employee days worked for the period covered by the number of hours worked per day. If the hours worked per day vary among departments, separate estimates should be made for each department and the results added together. The total number of employee days for a period is the sum of the number of employees at work on each day of the period. When actual employee hours are not used, indicate the basis on which the estimate is made.

The total hours worked, including overtime and training and excluding leave and sickness, by employees engaged in the activities of the organisation in the period under review.

- a) **EMPLOYEES LIVING ON COMPANY PROPERTY:** In calculating hours of exposure for employees who live on company property (e.g. seamen on board of a ship), only those hours during which employees were actually on board shall be counted (24 hours of exposure, per employee, will be counted for all shipping/oilrig operations).
- b) **UNDEFINED WORKING HOURS:** For travelling salesmen, executives and others whose working hours are not defined, an average of 8 hours per day shall be assumed in computing exposure hours.
- c) **STANDBY EMPLOYEES:** For standby employees who are restricted to the confines of the employer's premises, all standby hours shall be counted, as well as all injuries occurring during such hours.

### 6.2.2 EXPOSURE OF CENTRAL OFFICE

The experience of a central administrative office or central sales office of a multi-establishment concern shall not be included in the experience of any one establishment, nor shall it be prorated among the establishments, but it shall be included in the overall experience of the concern.

### 6.2.3 MEASUREMENT OF EXPOSURE TO HOURS

Exposure to occupational hazard shall include the total number of hours of employment of all employees in each establishment, including employees of operating, production, maintenance, transportation, clerical, administrative, sales and other departments. If any departments are excluded from the experience rate of an establishment or industry, this fact shall be stated.

### 6.2.4 DIFR EXPOSURE PERIOD

The exposure rates will normally be calculated over 12 months.

In those cases where a company with a smaller workforce wishes, for practical reasons, to calculate their frequency rates over longer periods, the table that follows will be applicable.

For example a small company with 20 employees has a five star grading for 10 years with no DI in the whole period. In year 11 it has one DI and could lose all its stars because the DIFR is above 5. If it calculates the hours AND incidents for the past 6 years it can regain its grading because its record for the past 11 years indicates only one DI.

The DIFR is an indication of the percentage of employees injured per year. The premise is that 100 employees work more or less 200 000 man hours per year. The DIFR is therefore an indication of the percentage of employees who suffered disabling injuries in the last 12 months. The measurement of the effectiveness of the system is for the last 12 month period.

Allowing a company with more than 300 employees to calculate their DIFR over more than a 12 month period is defying the purpose of the audit, i.e. measuring the effectiveness (DI incident performance) of the implemented system over the last 12 month period. Allowing companies with less than 300 employees to measure their DIFR over a 24 month period is more than reasonable and allow the company to "compensate" for a "bad" year based on the previous year's "good" performance.

The same argument goes for companies with between 101 and 249 employees to fall back on three years' experience and companies with between 51 and 100 employees to fall back on four years' experience. Companies with less than 50 employees should be given the opportunity to calculate incident frequency rates over six years.

## 7. MEASUREMENT

### 7.1 MEASUREMENT OF INCIDENT EXPERIENCE

#### DISABLING INCIDENT DEFINITION

For NOSA's record purposes a "disabling incident" is defined as any incident which arises directly out of and in the course of duty, resulting in any occupational illness, injury or disease; and giving rise to any related temporary or permanent disablement as determined by a medical practitioner. Such an incident shall furthermore be classified as "disabling" where one or more of the following criteria are applicable:

- The affected person is unable to continue with all of the tasks for which s/he was appointed responsible and which constitute his or her normal work duties;
- The loss of one or more days or shifts following the shift during which the incident occurred, inclusive of weekends and scheduled off-duty days;
- All fractures and amputations, irrespective of whether any days were lost (with the exception of a hairline fracture which is certified by an attending physician as needing no further medical treatment, and provided that no supportive material is applied - e.g. a plaster cast);
- Unconsciousness, irrespective of duration, resulting from any workplace exposure or incident;
- Occupational illnesses which necessitate medical treatment resulting in restricted duties or days off work; and
- Compensatable occupational diseases, which must be recorded as a single DI on the day of diagnosis, irrespective of whether any days are lost.
- Diagnosed cases of noise induced hearing loss

**NB:** Any bone damage except closed damage to the tuft of the terminal phalanx is classified as a disabling incident, e.g. closed fracture, amputation of the tip of a finger, etc.

## 7.2 OCCUPATIONAL SAFETY INDICATORS

### 7.2.1 FATALITY FREQUENCY RATE

The number of fatal incidents resulting from occupational injuries and/or illnesses per 200 000 employee hours of exposure. The fatality frequency rate is based on the total number of deaths which occur during the period of exposure.

### 7.2.2 PERMANENT DISABLING/IMPAIRMENT FREQUENCY RATE

Number of permanent impairment incidents arising from an occupational injury per 200 000 employee hours of exposure. The permanent impairment frequency rate is based on the total number of permanent disabling/impairment cases which occur during the period of exposure.

### 7.2.3 PERMANENT PARTIAL DISABILITY

Number of permanent partial disability incidents arising from an occupational injury per 200 000 employee hours of exposure. The permanent partial disability frequency rate is based on the total number of permanent partial disabling cases which occur during the period of exposure.

### 7.2.4 LOST WORKDAY FREQUENCY RATE

The number of occupational injuries - which render the person unable to return to work on the next calendar day (including weekends and public holidays) after the day of the injury - per 200 000 employee hours of exposure. The lost workday frequency rate is based on the total number of lost workday cases which occur during the period of exposure.

### 7.2.5 RESTRICTED WORKDAY FREQUENCY RATE

Number of occupational injury incidents which render the person, although at work, unable to perform the full duties of his/her regular work on the next calendar day (including weekends and public holidays) after the day of the injury per 200 000 employee hours of exposure. The restricted workday frequency rate is based on the total number of restricted workday cases that occurred during the period of exposure.

### 7.2.6 MEDICAL TREATMENT FREQUENCY RATE

Number of occupational injury incidents requiring medical treatment\*\* by registered professional personnel, per 200 000 employee hours of exposure. The medical treatment frequency rate is based on the total number of medical treatment cases that occur during the period of exposure.

\*\*The following procedures are generally considered medical treatment:

- a. Treatment of INFECTION resulting from an injury (including follow up visits to clinic).
- b. Application of ANTISEPTICS during second or subsequent visit to medical personnel.
- c. Treatment of SECOND OR THIRD DEGREE BURN(S).
- d. Application of SUTURES (stitches) or steri strips in lieu of sutures.
- e. Application of BUTTERFLY ADHESIVE DRESSING(S) or STERI STRIP(S) in lieu of sutures.
- f. Removal of FOREIGN BODIES EMBEDDED IN EYE.
- g. Removal of FOREIGN BODIES FROM WOUND; if procedure is COMPLICATED because of depth of embedment, size, or location.
- h. Use of PRESCRIPTION MEDICATIONS (except a single dose administered on first visit for minor injury or discomfort).
- i. Use of hot or cold SOAKING THERAPY during second or subsequent visit to medical personnel.
- j. Application of hot or cold COMPRESS (ES) during second or subsequent visit to medical personnel.
- k. SURGICAL DEBRIDEMENT (cutting away of dead skin).
- l. Application of HEAT THERAPY during second or subsequent visit to medical personnel.
- m. Use of WHIRLPOOL BATH THERAPY during second or subsequent visit to medical personnel.
- n. POSITIVE X-RAY DIAGNOSIS not including hairline fractures (fractures, broken bones, etc.).
- o. ADMISSION TO A HOSPITAL or equivalent medical facility FOR TREATMENT.

**NOTE:** Medical treatment cases will only be considered as disabling injuries/cases should it result in lost workday cases or restricted workday cases as defined by 7.2.3 and 7.2.4.

### 7.2.7 FIRST AID TREATMENT FREQUENCY RATE

Number of first-aid cases, treated out of a first aid box and/or by medical personnel, which do not result in further medical complications per 200 000 employee hours of exposure. The first-aid treatment frequency rate is based on the total number of first-aid treatment cases which occur during the period of exposure. First aid cases are not considered for the NOSA qualifying criteria.

## 7.3 OCCUPATIONAL HEALTH INDICATORS

### 7.3.1 HEALTH FATALITY FREQUENCY RATE

The number of fatalities caused directly by occupational diseases, irrespective of whether the diseased employees were working at the time of their death, per 200 000 employee hours of exposure.

Irreversible diagnosed diseases that progress to the death of the affected person will be included in both the health fatality and irreversible diagnosed disease frequency rates, assuming that time elapsed between initial diagnosis and the death.

### 7.3.2 IRREVERSIBLE DIAGNOSED DISEASE FREQUENCY RATE (EXCLUDING NOISE-INDUCED HEARING LOSS CASES)

This is the number of irreversible disease cases diagnosed by medical practitioners per 200 000 employee hours of exposure.

### 7.3.3 REVERSIBLE OCCUPATIONAL DISEASE FREQUENCY RATE

This is the number of reversible occupational diseases diagnosed by medical practitioners per 200 000 employee hours of exposure.

Medical conditions as a result of allergic manifestations will not be regarded as occupational diseases.

### 7.3.4 NOISE-INDUCED HEARING LOSS FREQUENCY RATE

This is the number of diagnosed permanent noise induced hearing loss cases per 200 000 employee hours of exposure, including permanent partial hearing loss, as diagnosed. A noise induced hearing loss case will be considered when the hearing of an employee has deteriorated by 10% or more either from the company baseline or from the November 2003 baseline, whichever test was performed last. In the absence of a baseline it will be assumed that the total percentage of hearing loss occurred at the company. A noise induced hearing loss case will be considered for every 10% hearing deterioration.

**IMPORTANT CONDITION** – medical screening resulting in an audiogram for all employees exposed to noise above the noise-rating limit is compulsory when a company has noise zones within which employees work. Only restricted grading outcomes (not eligible for entry into NOSA competitions) shall be awarded to companies in the following instances of non-conformance –

- Potential noise zones are not measured and identified
- Employees exposed to noise within these zones do not have a valid audiogram
- Identified cases of potential noise induced hearing loss are not diagnosed within 12 months

**NB:** Should any days be lost for any of the above, these lost-day cases will be considered as disabling and included in the calculation of the DIFR.

## 7.4 ENVIRONMENTAL INDICATORS

### 7.4.1 MAJOR ENVIRONMENTAL INCIDENT

An incident or sequel of incidents, whether immediate or delayed, that results or has the potential to result in widespread, long-term, persistent negative impact on the environment. This usually involves long-term external intervention and/or has a high risk of legal liability.

### 7.4.2 MEDIUM ENVIRONMENTAL INCIDENT

An incident or sequel of incidents, whether immediate or delayed, that results or has the potential to result in public danger, significant pollution, detriment to the environment which usually should be reported to the authorities or the community and involves short-term external intervention to prevent it from becoming a major incident. Individual medium environmental incidents are not considered for the NOSA qualifying criteria.

### 7.4.3 MINOR ENVIRONMENTAL INCIDENT

An incident or sequel of incidents, whether immediate or delayed, that results or has the potential to result in a contained or limited area of occurrence and short-term or temporary negative impact on the environment and which may involve internal intervention when required.

An incident where there is unnecessary wastage of a natural resource is also classified as a minor environmental incident. Examples are leaking water pipes, or escaping steam where it is obviously not the intention for the water to be leaking or the steam to be escaping. Minor environmental incidents are not considered for the NOSA qualifying criteria.

## 8. NOSA STAR GRADING SYSTEM

### 8.1 RAW DATA FOR HSE TO BE RECORDED

HSE QUALIFYING CRITERIA FOR NOSA STAR GRADING SYSTEMS RAW DATA COLLECTION				
DESCRIPTION	Number (Incidents)	Factor	Exposure (man-hours)	Rate
<b>HEALTH (ILLNESSES) FREQUENCY RATE</b>				
<b>Fatality</b>		200 000		
<b>Irreversible Diagnosed Disease</b>		200 000		
<b>Reversible Diagnosed Disease</b>		200 000		
<b>Noise-Induced Hearing Loss</b>		200 000		
<b>SAFETY (INJURIES) FREQUENCY RATE</b>				
<b>Fatality</b>		200 000		
<b>Permanent Disability/Impairment</b>		200 000		
<b>Permanent Partial Disability</b>		200 000		
<b>Lost Workday</b>		200 000		
<b>Restricted Workday</b>		200 000		
Medical Treatment		200 000		
First Aid Treatment		200 000		
<b>ENVIRONMENTAL (ENVIRONMENTAL IMPACTS) <i>Number of incidents</i></b>				
<b>Major Environmental Incidents</b>				
Medium Environmental Incidents				
Minor Environmental Incidents				
<b>DISABLING INCIDENT FREQUENCY RATE</b>		200 000		
<b>NOTE 1:</b> Only the criteria in bold will be used when calculating the DIFR.				
<b>NOTE 2:</b> Major environmental incidents are classified as "disabling" and will count as individual disabling environmental disqualifiers for star rating.				
<b>NOTE 3:</b> Reversible diagnosed diseases that <u>do not</u> result in time off or light duty may be excluded from the DIFR calculation. Proof that the reversible condition <u>did not</u> result in time off or light duty must be confirmed by a medical qualified person, such as a doctor or occupational health practitioner.				



## 8.2 DIFR CALCULATION AND INDIVIDUAL ENVIRONMENTAL INCIDENT CONTRIBUTION

a. To calculate the DIFR the following criteria will be included in the calculation:

- Number of fatal injury cases
- Number of permanent disability cases
- Number of permanent partial disabilities
- Number of lost workday cases
- Number of restricted workday cases
- Number of health fatality cases
- Number of irreversible diagnosed disease cases
- Number of reversible diagnosed disease cases – resulting in light duty or time off
- Number of NIHL cases

### CALCULATION

The sum of the above number of cases, multiplied by 200 000, divided by the number of exposure hours as defined in 6.2.1 of this document, is the Disabling Incident Frequency Rate. E.g. –

$$\frac{(\text{Number of cases}) \times 200\,000}{(\text{Number of hours worked over 12 months})} = \text{DIFR}$$

The sum of each individual classification of cases listed under a. above, multiplied by 200 000, divided by the number of exposure hours, is the individual Incident Frequency Rate such as PPDFR, PPDFR, LWDFR, RWDFR, etc.

Major environmental incidents will be a disqualifier for a star grading as indicated under 8.3.1.

### 8.3 TABLES AND DETAILS FOR DIFR AND STAR RATING CALCULATION

#### 8.3.1 HSE QUALIFYING CRITERIA APPLICABLE TO GRADING OUTCOMES

Star grading	EFFORT %	DIFR %	SAFETY					HEALTH				ENVIRONMENT
			Disabling Injury Frequency Criteria (Rate)					Disabling Illness Frequency Criteria (Rate)				Environmental Incidents
			F	PD	PPD	LW D	RW D	F	IDD	RDD	NIHL	MAJOR INCIDENTS
NOSCAR	≥ 95	≤ 0.8	0	0	≤ 0.25	≤ 0.5	≤ 0.8	0	0	≤ 0.5	≤ 0.8	0
5*	≥ 91	≤ 1.0	0	≤ 0.5	≤ 0.65	≤ 0.75	≤ 1.0	0	≤ 0.5	≤ 1.0	≤ 1.0	0
4*	≥ 75	≤ 2.0	≤ 0.1	≤ 1.0	≤ 1.25	≤ 1.5	≤ 2.0	≤ 0.1	≤ 1.0	≤ 1.5	≤ 2.0	1
3*	≥ 61	≤ 3.0	≤ 0.5	≤ 1.5	≤ 1.75	≤ 2.0	≤ 2.5	≤ 0.5	≤ 1.5	≤ 2.0	≤ 3.0	2
2*	≥ 51	≤ 4.0	≤ 1.0	≤ 2.5	≤ 2.75	≤ 3.0	≤ 3.5	≤ 1.0	≤ 2.5	≤ 3.0	≤ 4.0	3
1*	≥ 40	≤ 5.0	≤ 2.0	≤ 3.5	≤ 3.75	≤ 4.0	≤ 4.5	≤ 2.0	≤ 3.5	≤ 4.0	≤ 5.0	4
0*	< 40	> 5.0	> 2.0	> 3.5	> 3.75	> 4.0	> 4.5	> 2.0	> 3.5	> 4.0	> 5.0	> 4

LEGEND	
SAFETY	
<b>F</b>	Fatality (as a result of an accident [injury])
<b>PD</b>	Permanent Disability (evaluated by a medical doctor resulting in more than 30% PD)
<b>PPD</b>	Permanent Partial Disability
<b>LWD</b>	Lost Work Day (one complete shift loss)
<b>RWD</b>	Restricted Work Day (including "light duty")
HEALTH	
<b>F</b>	Fatality (as a result of an occupational disease, e.g. asbestosis)
<b>IDD</b>	Irreversible Diagnosed Disease (e.g. asbestosis, brucellosis, etc.)
<b>RDD</b>	Reversible Diagnosed Disease (e.g. Dermatitis that is reversible)
<b>NIHL</b>	Noise Induced Hearing Loss (diagnosed and confirmed by an Audiologist)
<b>NOTE:</b> All of the above categories of injuries and diseases must be added to calculate the DIFR (Disabling Incident Frequency Rate).	
<b>IMPORTANT:</b> The exception to the rule is Reversible Diagnosed Diseases (e.g. dermatitis) that does not result in time off – or in light duty.	

## 8.4 STAR GRADE ALLOCATION

### STEP 1: ESTABLISH THE OVERALL EFFORT SCORE (%)

### STEP 2: CALCULATE THE OVERALL DIFR

### STEP 3: CALCULATE THE INDIVIDUAL DISQUALIFYING INCIDENT FREQUENCY RATES

- Step 3a: Occupational injury (safety) frequency rates (F, PD, PPD, LWD, RWD)
- Step 3b: Occupational illness (health) frequency rates (F, IDD, RDD, NIHL)
- Step 3c: Number of Major environmental incidents

### STEP 4: APPLY CRITERIA AND ESTABLISH ELIGIBLE STAR GRADING

## 8.5 FATALITIES

### 8.5.1 OCCUPATIONAL FATALITIES SHOULD BE REPORTED TO NOSA WITHIN 24 HOURS OF THE FATALITY

- Companies/organisations that suffer a fatal injury or a fatality as a result of a terminal occupational disease will lose the awarded status immediately.
- Star grading display should be blanked out.
- Companies/organisations will be able to renew their status with a grading audit after the fatality.
- Company may not display the star grading status for the period between the fatality and the renewal of the status.

**NOTE:** According to the qualifying criteria in this document, the highest possible star grading within 12 months after a fatality will be a 4 Star grading status.

There is no time requirement for applying for a re-grading. A re-grading can be performed at the earliest convenience of the client and availability of auditors from NOSA.

## 9. CLASSIFICATION OF SPECIAL CASES

### 9.1 AGGRAVATION OF MINOR INJURY

If a minor injury is aggravated because of improper diagnosis or improper treatment, either professional or non-professional, or if infection develops later, either on the job or off the job, the injury shall be classified according to the ultimate extent of the treatment or disability.

### 9.2 AGGRAVATION OF PRE-EXISTING CONDITION

If aggravation of a pre-existing physical deficiency arises out of and in the course of employment, the resulting disability shall be considered a work injury and shall be classified according to the ultimate extent of the injury.

### 9.3 ANIMAL AND INSECT BITES

Animal and insect bites are work injuries if they arise out of and in the course of employment.

### 9.4 ATHLETIC ACTIVITIES

An injury to an employee resulting from participation in sport or other athletic activities, whether or not they are company sponsored, shall be considered a work injury only if the participant was paid by the company for these activities.

### 9.5 BACK INJURY

A back injury or strain shall be considered a work injury only if it meets all the following conditions:

- There is a clear record of an accident or an incident such as a slip, trip or fall, sudden effort, or over-exertion, or blow on the back.
- The medical professional authorised to treat the case is satisfied, after a complete review of the circumstances of the accident or incident that the injury could have arisen out of said accident or incident.

A back condition which is revealed while an employee is performing his normal, regular duties, which neither results from nor is caused by an accident or incident, shall not be considered a work injury.

### 9.6 DEATH FROM UNDETERMINED CAUSE

In fatal cases where death might have resulted either from an illness or from an accident following the illness, the case shall be considered a work injury only if it is the opinion of the attending doctor engaged or authorised by the employer that the illness arose out of, or was aggravated by, the victim's work.

### 9.7 DISABILITY ARISING SOLELY OUT OF PHYSICAL DEFICIENCY

If an accident or incident such as a slip, trip, sprain, strain or fall arises solely out of a pre-existing physical deficiency, and if a worker without such physical deficiency would not have suffered such an accident or incident, any resulting injury shall not be considered a work injury. However, an injury that arises out of and in the course of employment shall be considered a work injury even though the employee had a pre-existing physical deficiency.

### 9.8 DOUBTFUL DEGREE OF DISABILITY

In case of doubt as to the degree of disability, the classification of an injury shall be based on the decision of the medical professional engaged or authorised by the employer.

### 9.9 EXPOSURE TO TEMPERATURE EXTREMES

An injury that results from exposure to temperature extremes (heat or cold) is a work injury if it arises out of and in the course of employment.

## 9.10 EXTERNAL EVENTS

An injury which results directly from an external event of such proportions and character as to be beyond the control of the employer such as tornadoes, hurricanes, earthquakes, flood, conflagration, or explosion originating outside of employment, or from an immediate secondary event such as a fire, boiler explosion or falling electric wire, shall be classified as a work injury only if the victim was a policeman, fireman, member of a disaster or emergency squad, utility lineman or other employee who is assigned duties in connection with such events, unless classified as a compensatable injury by the Compensation Commissioner.

- Activities necessitated by external events: An injury that results from an activity necessitated by an external event such as fighting a fire, cleaning up debris, repairing equipment, shall be classified as a work injury.
- Lightning: An injury resulting from lightning shall be classified as a work injury if the conditions of employment are such as to anticipate exposure to such hazards as a matter of duty.

## 9.11 HERNIA

Any hernia shall be considered a work injury only if it is precipitated by an impact, sudden effort or severe strain, and meets all of the following conditions:

- There is a clear record of an accident or an incident such as a slip, trip, fall, sudden effort or over-exertion
- There is actual pain in the hernia region at the time of the accident or incident.
- The immediate pain was so acute that the injured employee was forced to stop work long enough to draw the attention of his foreman or fellow employee, or the attention of a medical professional was secured within 12 hours.

## 9.12 HORSEPLAY

An injury inflicted by or arising out of horseplay during employment shall be considered a work injury.

## 9.13 HOSPITALISATION FOR OBSERVATION

If after observation in a hospital for a period up to 48 hours from the time of an incident or suspected injury known to have a delayed effect (from such accidents as a blow on the head, or a blow to the abdomen, or the inhalation of harmful gases) the doctor determines that the injury was in reality slight, and that the injured person could have returned to work without any permanent impairment or temporary total disability, the injury shall be classified as a medical treatment case. However, if any treatment or medication at all is given after the first 24 hours of observation, the injury shall be classified as a lost workday case.

## 9.14 ILLNESS FROM ANTITOXIN

Illness resulting solely from antitoxin, vaccines or drugs used in the treatment of a non-disabling injury shall not cause the injury to be classified as a lost workday case.

## 9.15 INJURIES ON COMMON CARRIER

The injury or death of an employee travelling as a passenger on a common carrier as a result of an accident to that common carrier is a public transportation accidental injury and is not a work injury within the meaning of this standard. (If, however, company transport is supplied and used, then the injury shall be deemed to be a work injury.)

## 9.16 MUSCULAR DISABILITY

Muscular disability such as bursitis, tendosynovitis, etc., is a work incident if it arises out of and in the course of employment.

## 9.17 PURPOSELY INFLICTED INJURIES

An injury purposely inflicted by another person shall be considered a work injury if it arises out of and in the course of employment.

## 9.18 SKIN IRRITATIONS AND INFECTIONS

Skin irritations and infections such as dermatitis, etc., are work incidents if they arise out of and in the course of employment.

# 10. INTERPRETATIONS AND GUIDING EXAMPLES

## 10.1 ARISING OUT OF AND IN THE COURSE OF EMPLOYMENT

This means resulting from a work activity or environment of employment. Arising out and in the course of employment furthermore means that a causal link between the injury/disease and the task performed should be established.

## 10.2 GOING TO AND FROM REGULAR PLACE OF WORK

An injury would not be considered as arising out of and in the course of employment if it occurred during normal routine travel from the employee's home to the employee's regular place of business and return. Normal or routine travel would not include travelling at irregular hours for special or emergency work.

## 10.3 REGULAR PLACE OF WORK INACCESSIBLE

If a regular place of work is inaccessible to ordinary transportation and the company furnishes special transportation from designated meeting places, an injury would be considered as arising out of and in the course of employment if it occurred between the time an employee was picked up at such a meeting place and the time he was returned to the place.

## 10.4 EMPLOYEES NOT HAVING A REGULAR PLACE OF EMPLOYMENT

An injury to an employee who does not have a regular place of employment, such as a member of a public utility line crew, would be considered as arising out of and in the course

of employment if it occurred between the time he reached a designated meeting place for the crew and the time he was dismissed from duty at the point where the crew disbands.

## **10.5 EMPLOYEES WHO TRAVEL IN CONNECTION WITH THEIR WORK**

An injury to any employee (salesman, engineer, consultant, etc.) who may travel in the interest of his employer, either locally or long distances, would be considered as arising out of and in the course of employment if it occurred between the time his travel started (either from his home or from his place of work) and the time his travel ended (either at his place of work or at his home), except if the injury occurred:

- In an accident involving a common carrier on which the employee was travelling as a passenger;
- During normal living activities such as eating, sleeping, recreation, etc.;
- During deviations from a reasonably direct route of travel such as a side trip for personal reasons;
- During other activities neither necessitated by the travel nor in the interest of the employer.

## **10.6 ENTERTAINMENT BY OR AS A CUSTOMER OR CLIENT**

An injury to an employee which occurs while he is entertaining a customer or client, or while he is being entertained as a customer or client, for the purpose of transacting, discussing, or promoting business, would be considered as arising out of and in the course of employment.

## **10.7 MOVEMENT WITHIN CONFINES OF PLANT PROPERTY**

An injury would be considered as arising out of and in the course of employment if it occurred while the employee was going from the entrance to plant property to his place of work, or from his place of work to the exit from plant property, before or after working hours, except as provided in 10.13 or if it occurred while the employee was going from one part of the plant to another during working hours.

## **10.8 ABSENCE FROM COMPANY PREMISES**

An injury to an employee outside of plant premises would be considered as arising out of and in the course of employment if the absence from the premises was for a purpose that would normally be authorised by the employer and in the interest of the company.

## **10.9 LUNCH PERIOD INJURIES**

An injury to an employee which occurs during his specifically defined lunch period or other specifically defined off-duty period except as provided in 10.6, would not be considered as arising out of and in the course of employment unless it arose out of the hazards of the work area.

### **10.10 INJURIES DURING REST BREAKS**

An injury which occurs during a coffee break or other rest breaks would be considered as arising out of and in the course of employment unless it occurred under circumstances which are specifically excluded by other provisions of this standard.

### **10.11 SHOWER ROOM/ WASHROOM INJURIES**

This is an injury to an employee which occurs while he is going to or from a shower or wash room, or which occurs while he is taking a shower or otherwise using washroom facilities, before, during or after working hours on company premises, would be considered as arising out of and in the course of employment if use of the facilities was occasioned by the employee's work.

### **10.12 ATHLETE'S FOOT**

This and similar disabilities would be considered as arising out of and in the course of employment if the infection was connected with the use of plant facilities.

### **10.13 PARKING-LOT INJURIES**

An injury occurring on a parking lot established on company property for the convenience of employees would not be considered as arising out of and in the course of employment unless it occurred while the employee was performing the duties of his employment or was under the direction of a supervisor.

### **10.14 DISABILITY ARISING SOLELY OUT OF PHYSICAL DEFICIENCY**

This is an injury that arises out of and in the course of employment and shall be considered a work injury, even though a pre-existing physical deficiency may have been a contributing factor. But an injury arising solely from the pre-existing deficiency, with no work circumstance contributing, would not be a work injury.

### **10.15 ASSAULTS AND PURPOSELY-INFLECTED INJURIES**

An injury purposely inflicted by another person shall be considered a work injury if it arises out of and in the course of employment.

### **10.16 ACTIVITIES NECESSITATED BY EXTERNAL EVENTS**

An injury that results from an activity necessitated by an external event such as fighting a fire, cleaning up debris or repairing equipment shall be classified as a work injury. Note: For compensation purposes it is advisable to appoint such persons to the fire-fighting or emergency teams in writing.

### **10.17 DEATH FROM UNDETERMINED CAUSE**

In fatal cases where death might have resulted either from an illness or from an accident following the illness, the case shall be considered a work injury only if it is the opinion of the doctor engaged or authorised by the employer that the illness arose out of, or was aggravated by, the victim's work.



## **10.18 INJURIES ABROAD**

The scope of the audit will determine if injuries abroad will be included or not. Should the scope of the audit geographically only include the activities of the local plant, injuries outside the scope will not be included.